

I. Amendments to the Claims

This listing of claims shall replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Canceled)
2. (Previously Presented) An isolated DNA molecule consisting of a DNA sequence encoding a segment of polypeptide MTBN4 shorter than full-length polypeptide MTBN4, wherein said segment retains the antigenic properties of MTBN4 and wherein the MTBN4 polypeptide is not encoded by the genome of cells of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis*.
3. (Currently Amended) A vector comprising:
 - (a) an isolated DNA molecule consisting of a DNA sequence encoding polypeptide MTBN4, wherein the polypeptide is not encoded by the genome of cells of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis* ~~the DNA molecule of claim 1;~~ and
 - (b) a regulatory sequence operationally linked to said DNA sequence, said regulatory sequence allowing for expression of the polypeptide encoded by said DNA sequence in a cell.
4. (Previously Presented) A vector comprising:
 - (a) the DNA molecule of claim 2; and
 - (b) a regulatory sequence operationally linked to said DNA sequence, said regulatory sequence allowing for expression of the polypeptide encoded by said DNA sequence in a cell.
5. (Original) A cell transformed with the vector of claim 3.
6. (Original) A cell transformed with the vector of claim 4.

7. (Previously Presented) A composition comprising a vector and a pharmaceutically acceptable diluent or filler, wherein the vector comprises a DNA molecule consisting of a DNA sequence encoding polypeptide MTBN4 and wherein the polypeptide is not encoded by the genome of the cells of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis*.

8. (Previously Presented) A composition comprising a vector and a pharmaceutically acceptable diluent or filler, wherein the vector comprises an isolated DNA molecule consisting of a DNA sequence encoding a segment of polypeptide MTBN4 shorter than full-length polypeptide.

9. (Currently Amended) A composition comprising :

at least two DNA sequences, each encoding a polypeptide of the *Mycobacterium tuberculosis* complex that is not a polypeptide encoded by the genome of cells of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis*, said DNA sequences being operationally linked to a regulatory sequence which allows for expression of each said polypeptide in a cell of a vertebrate, wherein at least one of said at least two DNA sequences encodes for polypeptide MTBN4 ~~is a DNA molecule of claim 1.~~

10. (Previously Presented) A composition comprising:

at least two DNA sequences, each encoding a polypeptide of the *Mycobacterium tuberculosis* complex that is not a polypeptide encoded by the genome of cells of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis*, said DNA sequences being operationally linked to a regulatory sequence which allows for expression of each said polypeptide in a cell of a vertebrate, wherein at least one of said at least two DNA sequences encodes for a segment of polypeptide MTBN4 shorter than full-length polypeptide MTBN4, wherein said segment retains the antigenic properties of MTBN4 is a DNA molecule of claim 2.

11-54. (Cancelled)